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ABSTRACT

The report of the feasibility study for construction of a second high school in the Snowflake Union High School District includes discussions of student population data, educational factors, high cost factors for school operations, the educational planning process, and second high school plant facility needs. Based on outcomes of the feasibility study, it is recommended to the Board of Education that a second high school be built, opening in September, 1973. Four problem areas--legal problems related to bonding, rising construction costs, high interest rates, and adequacy of enrollment--are also discussed, and recommendations relevant to each area are offered. (JB)

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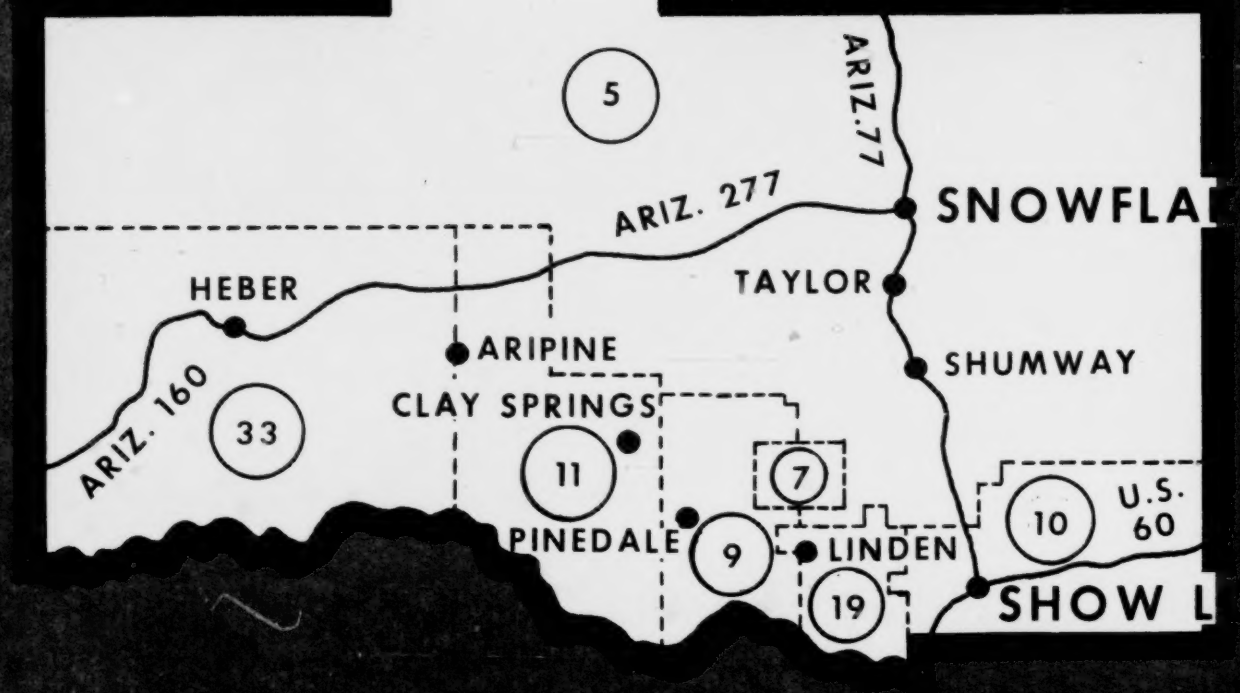
REPORT OF SURVEY

JANUARY 1970



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SNOWFLAKE UNION HIGH SCHOOL DISTRICT NO. 60

SECOND HIGH SCHOOL FEASIBILITY STUDY

Published by the

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R. Merwin Deever, Director

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College of Education
Arizona State University
Tempe, Arizona

January 1970

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Snowflake, Arizona

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ARIZONA STATE
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TEMPE, ARIZONA 85281

TO THE MEMBERS OF THE BOARD OF EDUCATION

This feasibility study for construction of a second high school in the Snowflake Union High School District is submitted for your careful consideration. It is an extension and updating of the REPORT OF SURVEY submitted in May, 1966. The basic considerations submitted in that report are the basis for this report.

The Board of Education and the citizens of the district are to be commended on the excellent job of upgrading the educational facilities at Snowflake High School. The following projects have been accomplished by the district and were in keeping with the recommendations of the Survey Report of 1966:

1. The purchase of an additional high school site in Show Low.

2. The acquisition of additional land adjacent to Snowflake High School.

3. The construction of the new auditorium-cafeteria and the science and homemaking facilities.

4. The remodeling of the library.

The community's development of an indoor swimming pool facility, available to the educational program of the high school, is a real indication of the community's interest in the welfare of the youth of the Snowflake area. The continued development of the newly acquired land for outdoor educational facilities is in keeping with good practice. The only urgent unfilled accomplishment is the improvement and enlargement of the dressing rooms and shower facilities for the physical education and athletic activities, for boys and for girls. This will have to be accomplished with another bond issue.

A new dimension is injected in this report for the consideration of the Board of Education and the Citizens Growth Committee. It concerns the relationship of the development of a second high school plant and the development of the community it serves. This bears important consideration.

It is hoped that this report will be of significant value to the Snowflake Union High School District. We wish to express our appreciation to all people of the district who have given so freely of their time and supplied pertinent information to make this report possible.

Respectfully submitted,

R. Merwin Deever, Director
Bureau of Educational Research
and Services

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Chapter 1

STUDENT POPULATION DATA

I. HISTORY OF DISTRICT'S GROWTH

History of Population Growth in Snowflake Union High School District

Population growth in general. The first white settlers came to the area for agricultural pursuits almost 100 years ago. Only within recent years have economic forces changed the growth patterns of the area. The development of Show Low as a center for recreational activities, as a supply center for the area and the development of the Southwest Forest Industries pulp and paper mill west of Snowflake have made a profound impact on the population growth. A newer development, that of the White Mountain Lake Resort area, has made a strong start toward increased population growth. This development, primarily that of serving retired persons, may not make a substantial impact on pupil population growth but it will definitely have an impact on the trade and service industries, especially in Show Low. The populations of the major communities within the Union High School District are found in Table 1.

The estimates of populations are based on a combination of utility connections, census data, and school enrollments but taking into account the declining birth rates, and increased population of retired people and summer residents. During the nine year period from 1960 until 1969 the population has almost tripled.

Table 1

Population of Larger Communities in Snowflake Union High School District by Selected Years, 1950-1969

YEAR	COMMUNITY				
	Snowflake	Taylor	Show Low	Heber-Overgaard	TOTAL
1950	929	n.a.	n.a.	n.a.	n.a.
1960	982	390*	1,625	425*	3,422
1965	1,728	425	1,994	825*	4,972
1967	n.a.	880	n.a.	n.a.	--
1969	2,500*	1,000*	2,850*	1,650*	8,000*

*Estimates made by members of the survey team. Other population data were taken from STATISTICAL REPORTS published annually by the Valley National Bank.

Other indicators of growth include the utility connections and increased pupil enrollments of both elementary and secondary schools. Several factors must be analyzed before conclusions can be made concerning growth based on these factors. The numbers of water meter connections do not always reflect the growth because in some cases one water meter serves several families in an apartment unit or multiple housing unit. In other cases the family well has gone dry and now the family has paid for a water connection with the community's water system. Not every new water meter connection means a new family being served in the community. Another utility that is a better indicator than water meters is the number of electric customers being served. In general, the electric franchise agent of a community requires that one electric meter serve an individual family unit. The number of electric meters in areas in which many summer homes are located might lead one to conclude that the population is greater than the actual count. Many meters serve an

individual in such homes, or at most a retired couple, or a larger family that lives elsewhere during the school months. It is assumed that all of the family units have been continuously served with electricity since 1960, however, there may still be some homes in the more remote areas that do not have electricity. It is assumed that all of the families in the larger communities have electricity.

Still another utility factor to consider is the number of gas meters in each community in which a gas franchise is operating. Tables 2 and 3 give data relating to the sizes of the larger communities of the district.

II. AVERAGE DAILY ATTENDANCE

The average daily attendance of both elementary and secondary schools within the Snowflake Union High School District for the 1958-1969 period are reported in Table 4. An examination of this table leads to the conclusion that the most rapid growth took place about the time that Southwest Forest Industries started the development of the paper and pulp mill west of Snowflake, beginning in 1961-62. The decline in ADA of the Snowflake Elementary School District in 1967-68 was due to the withdrawal of Indian pupils (79 in 1966-67 and 71 the year before). The further decline in 1968-69 was due to the reduction of kindergarten pupils (56 in 1967-68 and 38 in 1968-69). Table 4 is arranged so that the sub-totals represent the number of elementary school pupils in ADA in the areas that would be served by Snowflake High School and Show Low High School, if and when the second high school is built. These areas were

Table 2

Active Gas and Water Meters in Selected Communities, July 1969

Type of Service	Community				
	Snowflake	Taylor	Show Low	Heber	White Mt. Lake
Water	490	200	636	720	110
Gas	453	156	463	0	0

Table 3

Electric Customers in Selected Communities, 1958 and 1969

Type of Service	Community							
	Snowflake		Taylor		Show Low		Heber	
	1958	1969	1958	1969	1958	1969	1964	1969
Residential	235	517	124	408	321	651	407	805
Commercial	?	143	?	50	?	270	57	96
Miscellaneous	?	58	?	72	?	73	15	18
Totals	318	718	150	530	476	994	479	919

Information for Snowflake, Taylor and Show Low supplied by Mr. Jefferson Hunt of Arizona Public Service office in Holbrook, and information for Heber by the Navopache Electric Co-op.

Table 4

Average Daily Attendance of School Districts
in Snowflake Union High School District
for Selected Years

Districts	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966	1966-1967	1967-1968	1968-1969
Elementary:												
Snowflake	323	325	332	359	499	716	848	827	831	887	821	806
Taylor	132	123	106	126	142	↑	↑	↑	↑	↑	↑	↑
Heber	82	88	101	81	102	113	111	117	102	207	179	191
Overgaard	32	40	44	46	72	80	67	74	73	↑	↑	↑
Sub-Total	569	576	583	612	815	909	1026	1018	1006	1094	1000	997
Show Low	293	319	371	375	420	447	446	462	499	538	493	492
Burton	0	9	0	15	13	12	11	12	5	0	0	0
Linden	14	13	12	18	10	22	24	15	14	16	21	22
Pinedale	11	11	13	0	11	16	21	21	25	27	23	28
Clay Springs	32	35	36	44	43	53	55	54	60	64	63	64
Sub-Total	350	387	432	452	497	550	557	564	603	645	600	606
Total Elem.	919	963	1015	1064	1312	1459	1583	1582	1609	1739	1600	1603
Union H.S.	294	346	347	377	434	440	510	533	533	549	624	686
GRAND TOTAL	1213	1309	1362	1441	1746	1899	2093	2115	2142	2288	2224	2289

identified by administrative personnel. Taylor Elementary School District joined the Snowflake Elementary School District in 1962-63 and the Heber and Overgaard Elementary School Districts consolidated in 1966-67. The average daily attendance of the schools with the district almost doubled from 1960 to 1969 whereas the population as a whole almost quadrupled. Declining birth rates and the influx of retired people and summer residents contributed to the inbalance.

III. FACTORS INFLUENCING GROWTH

Factors Influencing the Growth of Public Schools

Many factors influence the growth of the pupil population in any school district. Within the Snowflake Union High School District the following factors were responsible for the growth within recent years: births, in-migration of families with school age children, improved holding power of the schools, the education of Indian pupils under government contracts, industrialization, development of retirement communities and resort communities, and availability of schools. A brief discussion of each factor is in order as it applies to the Snowflake Union High School District.

Births. The number of births in any area is dependent on many factors. Retirement communities experience few if any births while communities populated principally by younger families and lower income families experience a higher than average birth rate. The birth rate for an area is a predictor of school population because in the sixth year after the birth the child usually enrolls in school. In a stable community that experiences little in-migration the peak school enrollment in the public schools (grades 1-12) results in the

twelfth year following the highest birth rate year. The birth rates for Navajo County and the State of Arizona for selected years are recorded in Table 5.

Table 5

Resident Births and Birth Rates for Selected Years in Navajo County and the State of Arizona, 1960-1968

Year	Navajo County		State of Arizona	
	Resident Births	Birth Rate	Resident Births	Birth Rate
1960	1,443	38.0	36,655	27.7
1961	1,468	37.6	37.378	26.6
1962	1,577	37.3	37,785	25.8
1963	1,591	36.8	36,986	24.4
1964	1,584	34.5	36,169	23.3
1965	1,528	33.5	33,762	21.0
1966	1,441	33.7	32,326	19.5
1967	1,388	29.2	32,279	19.6
1968*	1,400	28.4	32,486	19.2

*Provisional; subject to slight changes when all information is verified.

It is more accurate to guage the effects of birth rates on growth in the Snowflake Union High School District by using the birth rates for the State of Arizona instead of the birth rates for Navajo County. This was true because the Navajo Indian population contributed heavily to the high birth rates within the county whereas the population within the Snowflake Union High School District had few Navajo Indian families within its boundary.

To accurately assess the effect of birth rates on the population of areas within the Snowflake Union High School District it is better to consider the actual number of births within each area. During the first ten months of 1968 the number of births in the two

areas that will eventually be served by Show Low High School and Snowflake High School were as follows:[1]

Show Low Area		Snowflake Area	
Show Low	66	Heber-Overgaard	15
Pinedale	2	Snowflake	57
Clay Springs	9	Taylor-Shumway	12
Total	77	Total	84

In-migration. The normal in-migration in an area affects the number of pupils to be educated. However, the in-migration in the Snowflake Union High School District did not appear to be normal. It was caused by the development of industries, retirement communities, and summer resort areas. The only normal in-migration appeared to be within the Show Low area by the steady increase in demands for services due to summer visitors and tourists on the year-round basis.

Holding power of schools. The improved holding power of schools results in more students staying in school and a resultant increase in total enrollment. For the most part the patrons within the Snowflake Union High School District have a strong belief in the value of education and have provided quality schools in keeping with this belief. The recent improvements at Snowflake High School are evidence of such conviction. Better teachers and better programs create the desire on the part of students to stay in school longer.

Indian students. The Indian students that were being educated by the Snowflake Elementary School District until June, 1967 resulted in a larger enrollment and average daily attendance than would have

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[1]Data supplied by Data Analyses Section of the Arizona State Department of Health.

been possible without the government contracts. The same holds true for the enrollment and ADA of the Snowflake Union High School as the high school district has a contract to educate approximately 128 Indian pupils each year. The contract terminates in 1973. Whether or not it will be renewed is unknown at this time.

Industrial growth. The impact of industrial growth has been felt by the communities within the Snowflake Union High School District. The single largest industry, the Snowflake Paper and Pulp Division of Southwest Forest Industries employed 414 people in May, 1969. The location of residences of these employees and the percentage breakdown for the communities was:

Snowflake.	58%
Taylor	16%
Show Low	15%
Heber-Overgaard. . . .	5%
Clay Springs-Pinedale.	4%
Other.	2%
	100%

The planned enlargement of the paper and pulp plant will provide additional jobs to construction workers for about eighteen months and such construction will probably begin within the next twelve months. Following the enlargement of the plant the number of permanent employees will be increased by about 125. When these additional permanent employees are selected, it will mean that many families will maintain or establish residences within the communities of Snowflake, Taylor and Show Low. Even during the construction stage some employees will bring families with them and their children will attend the schools within the area. Were it not for this industrial expansion it would mean that many of the young people

within the area would have to migrate to other areas of the state or nation to find employment. The census data presented earlier in this report clearly established the fact that with the beginning of construction of the plant in 1960, and followed by the beginning of operations, the populations of Snowflake and Taylor increased much more rapidly than in any prior time. These two communities will reflect greater growth from the enlarged plant than will the other communities. However, Show Low will continue to grow because of the enlargement of the plant and from increased tourism and as a service center for the entire area. The growth of both Snowflake and Taylor has been caused principally by the paper and pulp plant although it can also be stated that increased saw mill activity in both the Heber and Snowflake communities has caused some growth.

Retirement and resort developments. The development of retirement and resort communities has caused quite an influx of people to the area. In the Heber and Show Low areas the summer resort opportunities are developing and the populations are growing, especially in the summer months. The retirement community north of Show Low, White Mountain Lake, Arizona, will place increased service demands on Show Low. It is doubtful that this development will provide many students for the schools but the additional service requirements will bring families to Show Low. At White Mountain Lake it is estimated that twenty-five families live year round. More than 1,400 lots have been sold to about 1,000 different people. There are 50 permanent homes and about 140 mobile homes. Approximately 16 new permanent homes were under construction at the time members of the survey team visited the area. The developers plan to sell 500 lots in the next

10 months and expect to sell 2,000 acreage lots and 3,000 smaller lots before 1980. Water and electric power are now provided and it is expected that natural gas will be available within the next year. This community is within the boundaries of Snowflake Elementary School District and is 15 miles from Snowflake. It is 11 miles from Show Low.

Availability of schools. The population of any community is dependent in part on the availability of schools. Several people interviewed by members of the survey team in Show Low reported that their employees lived in Lakeside or Pinetop so that their children would be closer to a high school. One employer reported that he had difficulty in hiring qualified personnel because Show Low did not have a high school facility. If a high school were built in Show Low it is anticipated that this would contribute to the growth of Show Low. To what extent would be difficult to project. It is impossible to make specific predictions regarding this source of growth, but it is believed to be a positive factor.

IV. SUMMARY AND CONCLUSIONS

From information presented in this chapter it is evident that the larger communities are getting larger and the very small communities are remaining small. The population growth in the early 1960's was very rapid. The rapid increase in pupil population in some areas was the result of in-migration caused by industrialization and service demands made by residents in resort communities and tourists. The declining birth rates in Arizona probably reflect more accurately the birth rates in the Snowflake Union High School District

than do the birth rates for Navajo County. The declining births in Arizona, beginning in 1963, resulted in fewer pupils enrolling in the first grades in September, 1969. To off-set this decline there will be pupils coming from families who migrate to the area. The total school population of the area will continue to increase but not as rapidly as in the early 1960's because of the declining births. The high school enrollments will remain at a reasonably high level until about 1975 (assuming the continuance of the contract to educate Indians) but will not increase greatly between 1969 and 1975.

Chapter 2

EDUCATIONAL FACTORS TO CONSIDER

The "pro" and "con" arguments of "large" and "small" high schools are presented in this chapter. For purposes of discussion the "large" high school would be one large enough to accommodate the entire high school population of the Snowflake Union High School District during the next 10-15 years. The present high school plant is capable of accommodating 600 students comfortably. With crowded conditions and close scheduling it can meet the educational needs of almost 750 students. Therefore, "large" would indicate that the student population would require additional buildings on the present site.

The term "small" high school will mean the size of the two high schools in the district within the next 10-15 years if and when the second high school is built in Show Low. The two major recommendations in the Union High School District No. 60, Report of Survey, May, 1966 were as follows:

1. Two High Schools. Union High School District No. 60 must look forward to two high schools within the next few years and make plans toward that end.

2. Show Low High School. A high school should be built in Show Low when future growth reaches a level that is educationally and financially desirable. When two consecutive eighth grade graduating classes in the Show Low High School attendance area (Show Low, Linden,

Burton, Pinedale, Clay Springs), reach or exceed 100 pupils each year the Show Low High School should be constructed. The first year it should offer grades nine and ten, the second year grades nine, ten and eleven, and the third year grades nine, ten, eleven, and twelve.

The foregoing recommendations are still valid criteria. However, additional information is presented in this chapter so that the reader can understand the relative merits of one high school or two for the Snowflake Union High School District. The merits relate to the educational programs and other factors which are more closely related to the economics and the politics of making the decision.

I. FACTORS RELATED TO ONE LARGER HIGH SCHOOL

Educational Program

Larger high schools have a greater number of students to serve and thus have more diversified interests on the part of students. Larger high schools can offer a greater variety of courses than can small high schools. So the question might be asked: "What courses would Snowflake High School offer if it were allowed to grow to 1,000 or 1,500 students in size?" The answer is probably found in the types of courses and variety of courses found in high schools within the state that are of comparable size. Additional courses would include the third and possibly the fourth year of a foreign language, or several foreign languages, more advanced math and science courses, and one or two additional vocational education programs. But for each advanced course the response could well be: "Yes, but when students go to college they have to study the same course materials again." It is true that size alone is not a predictor of

program offerings. The high school graduate's chances of being successful in college is more dependent on the development of good study habits and proper attitudes than in the specific course work taken except perhaps in the area of foreign language.

Implications for Buildings

If Snowflake High School is allowed to grow much larger than 750 in maximum capacity it will mean the enlargement of the school plant. Most of the additions would be classrooms and shops. The gymnasium, auditorium and cafeteria could accommodate larger numbers if used on double sessions. Office space, library space, dressing rooms, etc. would need to be enlarged. There would be some savings in dollar expenditures if Snowflake High School were allowed to grow to a larger size. However, the necessity for the second high school might make such additional space useless at the time the student bodies were split.

Implications for Transportation

Were Snowflake High School allowed to grow to the size of 1,000-1,500 students the additional cost of transporting greater numbers of students from Show Low and areas close to Show Low might be of such immensity that serious study should be given to the matter. Factors relating to actual cost will be given consideration later in this report. It should also be reported that the loss in pupil time in riding busses is no small economic loss. If a dollar and cent price were placed on the time wasted while being transported to and from school, the cost would probably be staggering. For example, if the 250 students who are being transported from Show Low

daily were paid $1.00 per hour for their time, it would represent a waste of $250 per day. Perhaps such losses cannot be figured in dollars and cents, however, consideration must be given to the fact that such lost time can result in fewer opportunities for the students to learn or earn. In any event, the cost of transportation and the cost of lost student time represents a waste that must be given consideration.

Implications for Faculty

After a high school reaches about 350 students in number the student-faculty ratio remains about the same as for larger schools. The ratio in Arizona for these schools is about 20-21 students per teacher. The addition of students will not lower the per pupil cost of instruction, in fact the per pupil cost is greater for larger high schools in Arizona. There is little evidence that the larger high schools attract better teachers. There is evidence that better teachers are prone to accept offers from schools that offer higher salaries. Larger high schools permit more teachers to teach in their major field of preparation.

Implications for Administration

The number of people needed to administer a large high school is in proportion to the number of students to be educated. The larger the school the more difficult is the communication. In a high school with 600-800 students the principal will know practically every student and will know the majority of the parents of the students. In a large high school with a student population of 1,200-1,500 the principal actually knows fewer students, perhaps no more

than 300-500. He will get well acquainted with the trouble makers and with the outstanding students. However, for the large group of students who do not fall into either of these groups, he knows few. Demands on his time make it impossible to get acquainted with all of the students. The administrative staff at a larger high school must include the employment of assistant principals and more counselors. The students in large schools feel that they are not known and consequently their acts are of little consequence to either teachers or administrators. The social pressures that exist in the small high school do not exist in the large one. The percentage of the total school dollar spent for administrative cost in the small high school is not greatly different from the percentage in the large high schools. The average annual administrative cost per pupil in ADA in Arizona High School Districts for the school year 1967-68 were as follows:

Range in ADA	No. of Districts	Average Administrative Cost
1,500 and up	9	$ 32.30
1,000-1,500	5	25.41
750-1,000	7	30.08
600-750	7	28.86
500-600	7	36.20
400-500	5	27.45
300-400	4	41.55

A larger high school located in a single community is not as able to communicate with the patrons of the district as are two or more high schools. If there is more than a single high school within a district, some system should be devised to encourage patron participation in policy decisions pertaining to each school. An advisory board or committee might be established, appointed or

elected, to have specific responsibilities for areas of policy making and communication. This advisory board would have to work closely with the official board of education in order to provide the most desirable educational programs.

II. FACTORS RELATING TO TWO SMALLER HIGH SCHOOLS

Educational Program

The educational programs within smaller high schools normally would not have the variety of courses that could be maintained in a larger high school. However, such a large percentage of the students want to go to college that most elect to take courses that colleges require for entrance. Such a reality makes it impossible for the small high school to offer programs that might have more practical application to jobs within the community. The desire to get a college education requires the majority of students in both large and small high schools to take about the same courses. The average student in a large high school has a greater variety of courses to choose from yet his choices are fairly well established for him because of his interest to go to college.

Implications for Plant Facilities

The development of a second high school would require the use of two school sites (the second site has already been purchased). There will be additional costs in heating buildings and maintaining grounds. Two football fields will need care instead of one and the same will be true for other outdoor educational areas. The buildings will consist of regular classrooms, special classrooms, shops, adminis-

trative space, indoor physical education space, a lunch room, and possibly an auditorium. The number of regular classrooms will be dependent on the total number of students to be served and will be about the same in number whether in one high school or two. The special classrooms may differ somewhat in number. The library in one large high school should be in proportion to the size of the student body. Two high schools would each have a library but in both cases it need not be as large as for the larger school.

Implications for Transportation

When a high school is built in Show Low there would not be the need for as many busses as are currently used. The mileage requirement on the busses will not be as great as with only one high school. Cost factors will be treated later in the report. Students would not be required to waste as much time going to and from school with two high schools. Two high schools would result in a savings of transportation costs and of costs reflected in the loss of time on the part of students.

Implications for Faculty

Two smaller high schools would have some faculty members teaching in more subject fields than would be required in a larger high school. The number of faculty members is directly in proportion to the total students in the district and not particularly related to the number of schools within the district. Faculties in smaller high schools are more aware of each others' problems and are more willing to give a helping hand to fellow teachers. If additional help is needed to sell tickets at an athletic event, or a chaperon

is needed for a school dance, the large faculty is more demanding of extra pay for the extra work. Studies show that tenure duration for faculty members is shorter in the smaller school because salaries tend to be high in the larger schools.

Implications for Administration

Each of two high schools would have a principal. However, one larger high school will have both a principal and an assistant principal. The total number of administrators would be the same. In fact in very large high schools the ratio of administrators to students increases. The job of superintendent of the school district would be the same whether there be one or two high schools. His duties relate to business matters, board involvement, community relations and the general supervision of the district.

III. DEVELOPMENT OF STUDENT LEADERSHIP AND CITIZENSHIP

Leadership

Each high school has one student body president, one senior class president, one lettermen's club president, etc. Two smaller high schools offer twice the opportunities for developing leaders as does one larger school. Leadership has implications for follower-ship. When schools are smaller the students know each other and know who can be depended on to do specific tasks. And the accomplishment of the task is taken more seriously by the fellow students when they are well acquainted and friends. In smaller schools where teachers know students, students know teachers, and teachers know parents there are greater societal pressures to develop leadership responsibilies and to conform to the mores of the community.

Citizenship

Some factors presented in the previous paragraph are relevant to the development of citizenship. Good citizenship is demonstrated when people care for other people and take an active part in promoting activities which benefit not only themselves but others. School spirit can be generated more easily in the smaller high schools than in the larger ones. In the smaller school each student is needed and is wanted in promoting school plays, athletics, student government and other student endeavors.

IV. COMMUNITY DEVELOPMENT

Opportunities to Learn

High schools in America have not opened their doors to the adult community in the evenings to the degree that is wanted and needed. This can be said about both large and small high schools. Citizens of a community are more apt to participate in learning activities if the opportunity presents itself in a school not too distant from their homes. The junior colleges in Arizona are now offering more and more evening courses in high school buildings throughout the state. Not all courses need to carry either high school or college credit. Many can be offered at the time the need arises, like a short course for those who want to prepare their own income tax statements. Courses in gardening, cooking, typing, conversational Spanish, etc. are attractive courses in many communities. These must be offered at no expense to the taxpayers of the high school district and many high school teachers and members of the

community are willing to teach these courses for small stipends because they feel a certain satisfaction in teaching adults who want to learn. In some high schools organizations consisting of parents, students and teachers are established to promote the welfare of large numbers of students. Some of these organizations make it possible for students from low income homes to have textbooks and even clothing.

Community Service Opportunities

The high school in a community is frequently the hub around which many community activities revolve. Athletic contests excite many people during each sport's season. The recent development of the swimming pool at Snowflake High School by public spirited citizens of the area is an excellent example of what a community can do when a catalytic agent is present in the community. High school athletic fields are frequently made available during the summer months for community recreational activities, many of which are sponsored by county recreational boards of city parks departments.

Community Growth

Reference has already been made to the fact that some people do not accept employment in Show Low because a high school is not within the community. The mere fact that a community has a high school is an important factor in the minds of the people who live in the community. But growth per se is not the all important thing; growth with a purpose is far more important.

V. SUMMARY

A larger high school offers some advantages over a small high school. The larger school can offer more subjects, have more teachers teaching in their major teaching field, and is somewhat more economical in operational and building costs.

The small high school provides more opportunities for development of student leadership, cuts down on transportation costs, and provides an institution for community development.

The presence of a good high school in any community can contribute greatly to the education of high school age youth, to develop leadership and good citizenship, and can provide the vehicle through which the community can work for it's own development. Progress results when members of the community develop their own talents and pull together to make it a better place in which to live.

Chapter 3

HIGH SCHOOL COST FACTORS

I. OPERATIONAL COST FACTORS

Definition of Operational Costs

As defined by Arizona law the operational costs of a high school district are the costs incurred for salaries, supplies, utilities, insurance, transportation, and normal maintenance. Capital outlay costs are those expenditures for debt service, purchase of furniture and equipment, improvement of adjacent ways, and major alterations and improvements to the grounds or buildings. Arizona Revised Statutes 15-1201 sets forth the school budget form that must be used by all elementary and secondary school districts in Arizona. The first seven categories of the budget are considered to be the operational costs. A comparison of the annual average per pupil operational costs for Snowflake Union High School District, Navajo County and State of Arizona is presented in Table 6.

An examination of Table 6 indicates that the transportation costs for the Snowflake Union High School District, on a per pupil basis, is twice as large as for the county and almost four times that of the state.

Operational Costs and Debt Service Costs by Size of High School Districts

Many studies have been made of the operational

Table 6

Average Annual High School Cost Per Pupil
in Average Daily Attendance for Selected
Units for School Year 1967-68

Category of Cost	Snowflake Union H.S.	Navajo County	State of Arizona
General Control	$ 19.73	$ 27.71	$ 32.73
Instruction:			
Salaries	390.54	459.72	509.08
Other Expenses	52.42	39.78	41.46
Operation of Plant			
Janitors Salaries	36.52	30.44	45.77
Other Expenses	29.85	38.69	30.30
Maintenance of Plant	20.53	29.28	31.74
Auxiliary Agencies			
Transportation	54.08	27.44	14.38
Other Expenses	8.23	15.87	14.54
Fixed Charges	35.93	37.83	29.35
P.L. 89-10 & 89-750	85.34	62.20	22.71
Total Current Expense	733.17	768.96	772.07

Data taken from "School Costs, 1967-68" published by The Arizona Tax Research Association.

and capital outlay costs for high school districts of varying size. In almost all the studies the costs are more nearly related to the ability of the district to support education than to size, except for costs in very small districts. High school districts with more than 350 students experience a leveling off of costs, however, it is not until the district has 750-1,000 students that it operates at the lowest costs. When districts get larger than 1,500 students the costs generally increase somewhat gradually. From the economic point of view there is little to be gained when high school districts get larger than 600 students. Figure 1 graphically presents these relationships.

The debt service is defined as the cost of bond payments and interest on the bonds. It does not include the capital outlay expenditures that are budgeted in the general operational budget on an annual basis. Any comparison of debt service costs must be tempered by the consideration that some districts have experienced rapid growth and have thus had to bond frequently and have sizable debt service requirements. Some districts have experienced little or no growth and may have paid off all the bonds. Studies have reported that school districts in general usually spend about the same proportion of their school dollars on buildings. These expenditures include the initial cost, operational cost, maintenance costs, and insurance costs. The wealthier districts that can afford higher salaries for personnel generally spend more for buildings and vice versa. The high school per pupil cost in relation to size of school district is presented in Figure 1.

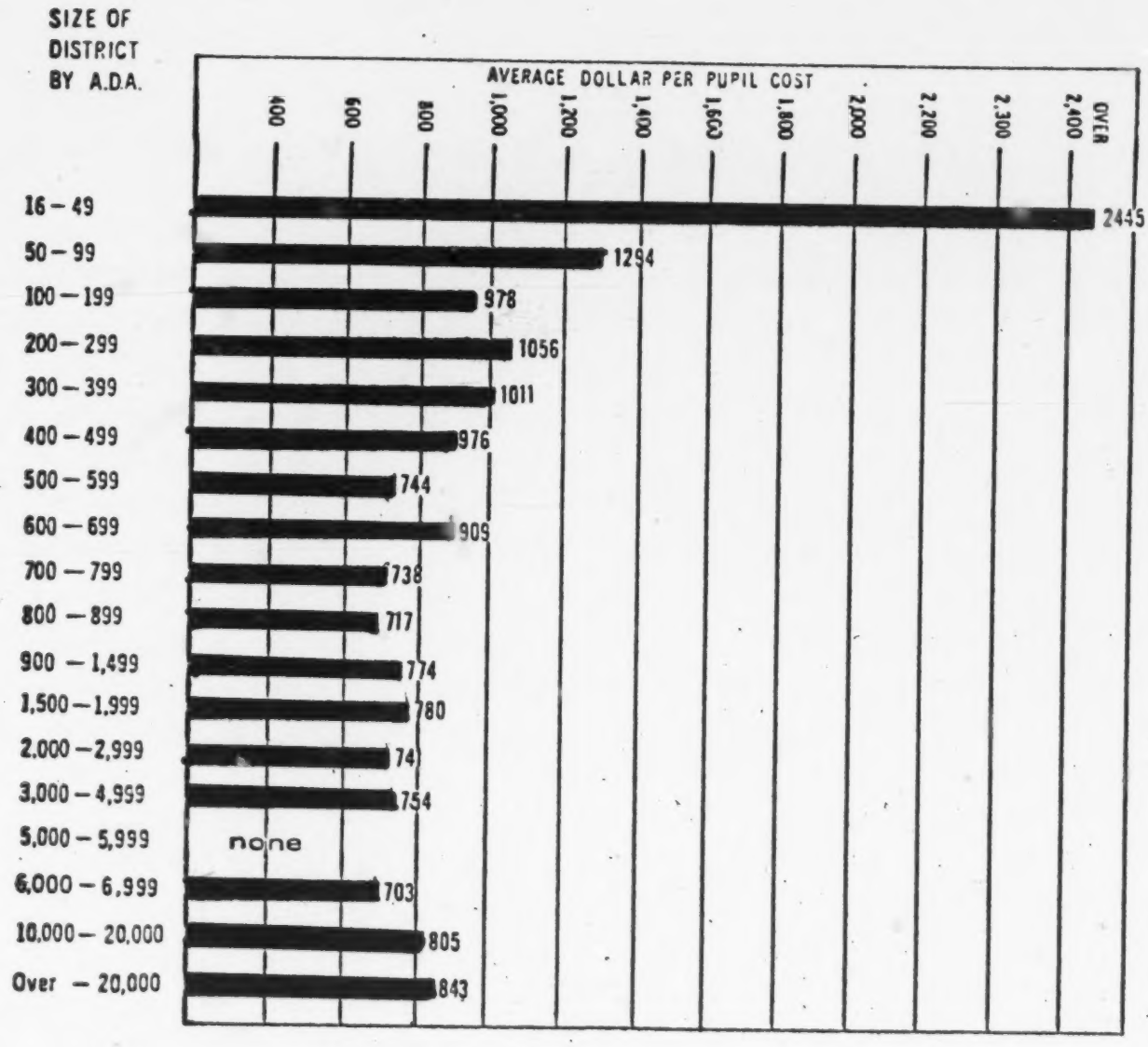

Figure 1

Average High School Per Pupil Cost
1967-1968
In Relation To Size of School District

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[1]Ralph Goitia, "A Study to Develop an Instrument to Measure the Adequacy of Present and Future School District Organization in the State of Arizona" (unpublished Doctor's dissertation, Arizona State University, Tempe, 1969.)

Table 7 presents data regarding the per capita costs for operating high school districts in Arizona for the school year 1967-68 and for the debt service requirements. These data are categorized by size of districts; all districts with more than 300 ADA within the state are reported.

Table 7

Size of Arizona High School Districts, Number of Districts, Per Capita Operational and Debt Service Costs for the School Year 1967-68

Size of Districts ADA	Number of Districts	Per Capita Costs	
		Operational	Debt Service
Over 1,500	9	$ 738.60	$ 120.34
1,000-1,500	5	736.64	101.12
750-1,000	7	711.54	71.56
600-750	7	721.11	115.34
500-600	7	793.53	86.67
400-500	5	821.87	82.03
300-400	4	932.58	64.02

Data from "School Costs, 1967-68" published by The Arizona Tax Research Association.

The data presented in Table 7 indicates that the per capita operational costs in Arizona High School Districts is in keeping with the per capita costs reported in other studies in other states. The high school districts with 750-1,000 students have the lowest per capita operational costs. The per capita costs for debt service is not very meaningful unless each individual district is identified and

a history of growth is reported for each.

Operational Costs and Number of High Schools within Districts

In Table 7 data were presented concerning the per capita operating costs of high schools in Arizona according to the number of pupils in average daily attendance within the district. In the first size category, those with more than 1,500 pupils in ADA, all nine school districts had two or more high schools. None of the districts having between 600 and 1,500 in ADA had more than one high school. Only in two districts with fewer than 600 pupils in ADA were there two or more high schools. Apache County High School District with an ADA of 571 had an average per capita operational cost of $1,248.68. The district had four high schools in operation. North Yuma County Union High School District had two high schools, one at Parker and a very small one at Salome. For the same year, 1967-68, they had an average operating cost of $1,132.02 per pupil. None of the high schools of these two districts had more than 400 pupils in a single school and five out of the six schools probably had fewer than 250 students in ADA. The high costs of multiple schools in these two districts is no indicator of the expenses that Snowflake Union High School should encounter with the development of a second high school in Show Low. These two communities are close enough together that some specialized teaching personnel could be shared by the two schools (this is not optimal educationally) whereas in the two districts just mentioned the schools are so wide-spread in geographical location that such an arrangement was impossible.

II. TRANSPORTATION COST FACTORS

Transportation Costs in Snowflake Union High School District

In the school year 1967-68 the district spent a total of $33,761.43 on transporting pupils. This represented an average expenditure of $54.08 for each pupil in ADA and not for each pupil transported. Had there been a high school in Show Low for that year the transportation costs would have been substantially less. For the school year 1969-70 the district found it necessary to provide five school busses to transport the students to and from Show Low. Even if a high school had existed in Show Low there would have been need for busses to transport pupils from Clay Springs and remote areas of Show Low. However, a reasonable estimate of savings might be calculated from the cost of transporting these pupils to and from Snowflake. The round trip for each bus is approximately 40 miles. The superintendent reported that each bus would average six trips each week because students were transported to and from athletic contests, school plays, etc. The cost of such an operation is about as follows:

5 busses x 6 trips/wk x 36 weeks x 40 miles/trip	= 43,200 miles
1 bus for summer school for 30 days	= 1,200 miles
	44,400 miles

The calculated cost of operating a school bus the size of those in operation in 1969-70 is 62.5c per mile. This will include depreciation, repairs, gas, oil, tires, drivers salary, and insurance.

An estimate of potential savings for 1969-70 would be:

44,400 miles x 62.5¢ = $27,750

As the students increase in number the cost will grow.

III. SUMMARY

Arizona high school districts with average daily attendance within the range of 750-1,000 students operate at the lowest per pupil cost. Schools with fewer that 350 students generally have high operating costs. When the size approaches 350 in number, the operating costs start to level off and reach the lowest operating costs within the 750-1,000 ADA size. There is little evidence that the number of schools affects the operating costs adversely. Pupil transportation costs are high for Snowflake Union High School District because of distances that large numbers of pupils must be transported. The annual savings in transportation costs would make a sizable payment toward debt service of a second high school.

Chapter 4

EDUCATIONAL PLANNING PROCESS

Before any school is to be built it is wise to engage in educational planning in order to insure that the buildings and ground will lend themselves to the kinds of educational experiences that are desirable and productive. The personnel to be involved in this planning should include lay people, board members, professional staff members, a professional consultant in school facilities planning, students and non-professional staff members. The planning should include the following tasks: developing the philosophy for the school and detailing the purposes, identifying the educational programs needed to achieve the purposes, projecting the student enrollments by areas as well as by years, write educational specifications that can be used by the architect in developing working drawings, and projecting the costs and planning the finances. The development of educational specifications requires the assistance of an educational consultant with special competence for this work.

I. PURPOSES OF THE SCHOOL

It would not be proper for an outside group to determine the purposes of the school that might be built in Show Low or any other community within the district. The purposes of the school should be determined by citizens of the district, working with

professional help and with students. The professional leadership might be provided by the superintendent if adequate time can be arranged in his schedule. All teachers should be involved. Students and parents should be involved. Answers to the following questions should be sought:

1. What should this school provide in the way of services to the community in which it is located?
2. What should this school do for the students in the way of learning fundamental procedures to solve problems?
3. What vocational-technical programs are needed to provide skilled personnel for services within the area?
4. What characteristics of good citizens should the school inculcate into the students?
5. What health habits should be learned and practiced by students?
6. Does the school have any responsibility for providing entertainment for members of the community?

Other questions need to be asked by those participating.

II. DETERMINING THE EDUCATIONAL PROGRAM

Once the purposes of the school are determined the professional staff needs to go to work to outline the types of educational experiences that are needed to fulfill the purposes. The curriculum needed will consist of class work, student activities, field trips, individual study, research projects by students, student participation in community activities, programmed learning and many other student activities. These are professional in nature and teachers are prepared to design programs to accomplish the purposes of the school. These should be submitted to the board of education and shared with members of the community. School personnel and school boards are

prone to permit college entrance requirements to dictate program. This is most unfortunate. The eight year study conducted some thirty years ago clearly established that it was not what the student studied in high school that determined his success in college: it was the work habits, the study habits, the development of an inquisitive mind, the ability to solve problems that determined success in college. Attitudes toward work, other people, ones self, and the mastery of the fundamental processes are very important to success.

The educational program should be determined by the members of the professional staff in consultation with citizens of the community. The program should not be one that is borrowed from another community; it should be developed primarily for the community in which the school is located.

III. PROJECTING PUPIL POPULATIONS

This task can be accomplished by an outside agency or by personnel within the district who know how to utilize data that are available. The projections should be widely distributed so that any errors in data or possible developments not known to those making the projections can be included. The pupil population projections will be provided in the next chapter.

IV. WRITING EDUCATIONAL SPECIFICATIONS

The writing of the educational specifications or program requirements is to insure that the architect will become acquainted with the facility needs to accomplish the tasks. The specifications

are nothing more than a word picture of essential items that must be given consideration to accomplish the task. Each space requirement must detail the type of activity that is to take place in the space. It must identify the number of students to be accommodated, the type of equipment that will be needed, special considerations relating to electric current, light, acoustics, etc. Storage space for student projects need to be indicated, storage space for students' books and outdoor clothing is also needed. A complete and comprehensive picture of what is to be learned, how many are to be taught, the size and type of equipment needed to accomplish the task, and how students will move around the space during the regular instructional period are all essential to the architect. An outside agency can be of great assistance to school personnel in drawing up and writing the educational specifications, however, no such agency should do this type of work without the fullest cooperation of the professional staff, students, citizens, and board of education.

V. PROJECTING COSTS AND DETERMINING FINANCES

Once the projections on size of the student body is determined and the educational program is developed it is a simple task to determine the approximate number of buildings that will be needed for the school plant, the number of regular classrooms, special classrooms, laboratories, shops, outdoor and indoor physical education space, and special service area needs. Approximate square footage can be determined for each and then the architect can give a fairly accurate estimate of the projected cost. Such plans must include the furniture and equipment that will be needed as well as the buildings.

Included also must be the books for the library or learning center. Some approximate costs are submitted in the next chapter but when the final decision to build is made the data presented should be carefully reviewed to reflect changes in building costs or changes in needs.

School districts in Arizona must depend on the local citizens to finance the physical plant. Only two avenues are open to most school districts. One method is to finance on a pay-as-you-go plan by levying the 10¢ building fund levy each year until the balance is large enough to accomplish the building task. Only a few school districts in Arizona have sufficient wealth to build by this procedure. The other method is to vote general obligation bonds, sell them to get the money needed, and pay off the bonded indebtedness over a period of years. With the normal inflation that has been developing in this nation within recent years the first method, even with wealthy districts, might result in higher costs due to delay in building. No interest would be paid but the higher building costs caused by delay might more than offset interest costs. The bonding procedure permits immediate building, complete and comprehensive development of the plant, and gives people who will have children in school in the years ahead an opportunity to pay for the facilities. The timing of bond issues to insure good interest rates is important. The last bond issue sold by Snowflake Union High School District had a very favorable interest rate. one that would not be available to it with today's tight money.

VI. SUMMARY

The planning of a school plant is a complicated task but a

rewarding one. It takes time, talent, proper procedures, and involvement of all members of the professional staff, non-professional staff, students and community. It can be compared with the planning of any important enterprise. Where are you going? What purposes are to be served or accomplished? What resources, human and material, are needed? What will it cost and where will the money come from?

Chapter 5

SECOND HIGH SCHOOL PLANT FACILITY NEEDS

Before school plant facility needs can be determined it will be necessary for the professional staff of the Union High School District, working with citizens of the community, to determine the purposes to be served by the school, the kinds of facilities needed, the number of pupils to be served, and projected needs as far as 10 years into the future. The considerations suggested in Chapter 4 must be resolved before accurate forecast of institutional needs can be determined. However, in order to give some guidance concerning approximate needs this chapter is provided.

I. BUILDING REQUIREMENTS

Projected Pupil Populations

One primary criterion on which building needs rest is that of numbers of students to be served within the foreseeable future. The foreseeable future for the high school population cannot be more than fourteen yea:s. The children born in 1968 will enroll in the high school in 1982. They have already been born. But where all now live is not known. The number born in each area to be served by the two high schools, for a ten month period in 1968, has already been presented. A total of 77 were born in the area that would be served by Show Low High School whereas 84 were born in the area to be served by Snowflake High School. Projecting the births for the

entire year of 1968 the two areas would have had 82 and 101 births respectively, or a total of 183. Even if every baby born were to live and be normal and progress through the elementary schools not more than 183 would be enrolled in the freshmen classes in 1982, unless others move into the district. However, it can be expected that many families will move into the area during the next fourteen years and the enrollments will be somewhat larger. Another interesting fact is that if the birth rate for Arizona were applied to 8,000 people in the population as indicated in Table 1, the total number of births in the Snowflake Union High School District would have been only about 154 instead of the projected number of 183. This means that the birth rates in the Snowflake Union High School District exceeds that of the state as a whole. If the birth rate of Navajo County had been applied to the 8,000 population figure, the number of births would have been about 227 instead of 183. The birth rates and the number of births in Navajo County and Arizona were reported in Table 5 on page 7.

Figure 2 illustrates the effect that the birth rates will have on enrollments for the next fourteen years. An examination of the figure, or of data in Table 5, leads to the conclusion that the ninth grade enrollments due to birth rates will remain relatively high until the fall of 1975 at which time it will begin to decline.

In Table 8 data are presented to indicate the residences of pupils enrolled during the period 1955 through 1969. When these data are compared with year-end membership data that are presented in Table 9, page 43, it must be concluded that the Indian pupils were counted as being in the Snowflake area, because the year-end

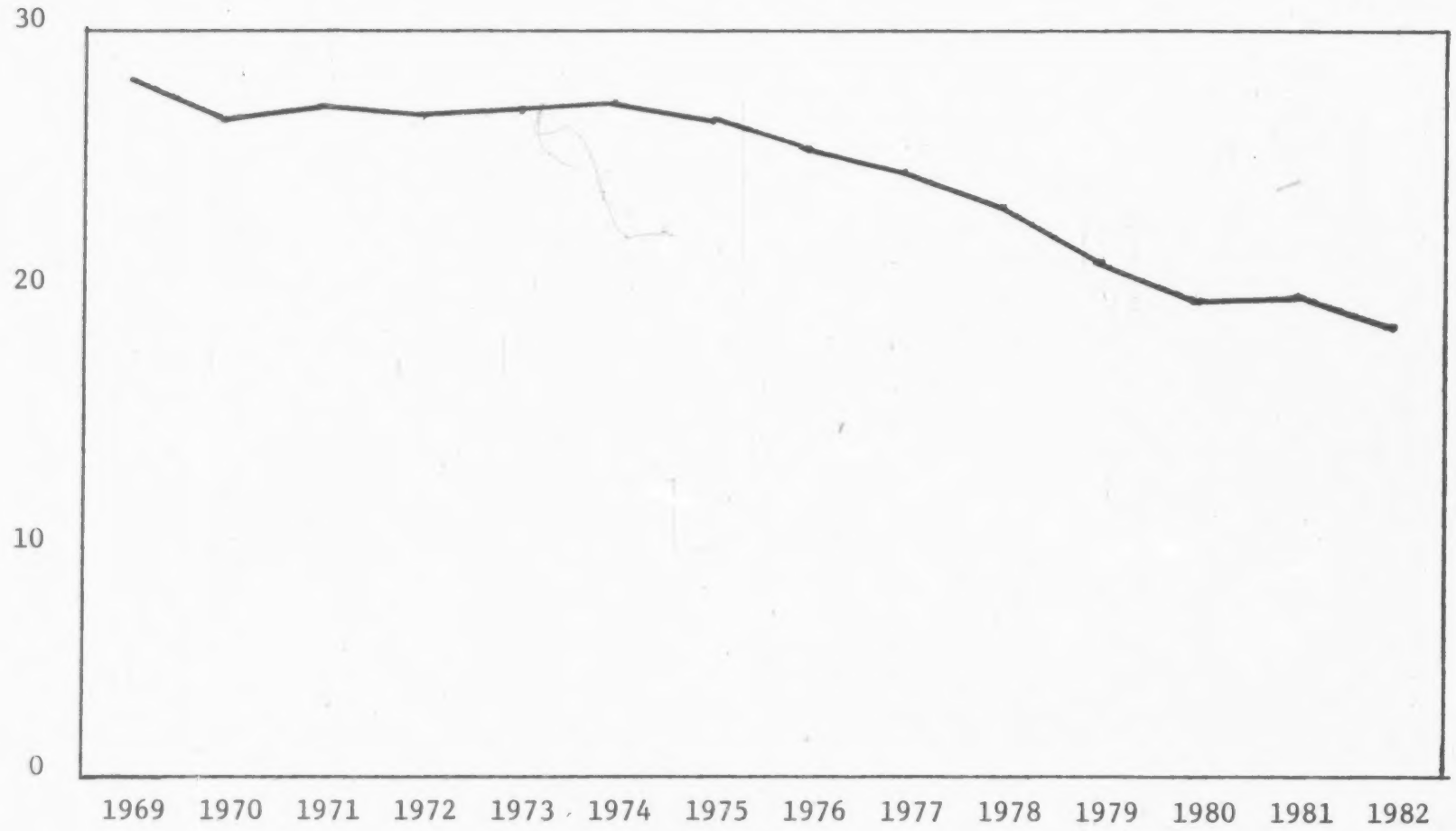

Figure 2

Ninth Grade Students for Each 1,000 Population
(Based on U. S. Birth Rates for
Years 1951-1968)

Table 8

High School Pupils Enrolled and Percentages
From Each of Two Areas, 1955-1969

Year	Snowflake H.S.		Show Low H.S.		Total
	Number	Per Cent of Total	Number	Per Cent of Total	
1955-56	184	63	110	37	294
1956-57	202	63	120	37	322
1957-58	253	63	148	37	401
1958-59	200	60	132	40	332
1959-60	210	62	131	38	341
1960-61	220	61	141	39	361
1961-62	325	64	185	36	510
1962-63	393	64	222	36	615
1963-64	375	65	197	35	572
1964 through 1967 not available due to fire.					
1967-68	453	65	238	35	691
1968-69	516	65	272	35	788

membership for Snowflake High School was only 703 at the end of the 1968-69 school year and the total enrollments in this table is 788. An examination of the table reveals that the total percentage of pupils contributed by the Snowflake High School attendance area ranged from 60 to 65 per cent whereas that represented by the Show Low area ranged from 35 to 40 per cent. The percentages have remained fairly constant.

The technique most commonly used to make pupil population projections is called the ratio-retention technique. This must be modified by birth rates of prior years. However, in the case of making projections for the Snowflake Union High School District one must consider that the growth is not steady. It has been irregular due to development of industry within the district. The projections made in the Union High School District No. 60 Report of Survey, May 1966 were compared with the year-end memberships during the ensuing years. The projections were a little greater than experienced for the first few years but somewhat smaller than that for the end of the 1968-69 school year. "Tight money," and the influence that a second high school will have on the growth of the Show Low area are two factors that make projection of population difficult. The year-end memberships for elementary districts that are in the attendance areas of schools is presented in Table 9.

An examination of totals in Table 9 might lead one to conclude that the enrollments of the elementary districts do not produce evidence that additional high school facilities are needed. However, the declining birth rates beginning in 1961 began to make a noticeable effect on the total enrollments, beginning in 1967 and 1968. But

Table 9

Elementary Year-End Memberships by Grades in Two High School Attendance Areas, 1965-1969

Grade	Snowflake High School					Show Low High School				
	1965	1966	1967	1968	1969	1965	1966	1967	1968	1969
1	155	149	161	127	151	101	103	102	83	79
2	142	134	144	118	122	85	82	94	83	84
3	122	116	149	128	113	90	93	73	84	84
4	138	133	123	138	124	76	80	90	67	84
5	115	112	129	112	137	74	79	84	72	76
6	128	121	129	128	111	78	74	78	75	82
7	109	141	121	108	125	74	74	64	67	74
8	115	119	153	113	103	58	69	79	69	73
Sp.Ed.	0	0	3	0	2	0	0	0	0	0
Total	1,024	1,025	1,112	972*	988*	636	654	664	600	636

*Decreases due in part to withdrawal of Indian pupils during the two years, 79 were enrolled at Snowflake in 1967.

the numbers of pupils in the upper grades increased somewhat during the five year period and thus the high school enrollments for the next few years will continue to increase. The projected in-migration will add to the totals created by births within the district. One must look at the total populations of the area (Table 1 on page 2) to get an appreciation of the effect of in-migration to the total population and it's possible effect on school enrollments. In Arizona, even if not another family moves into the state, the peak ninth grade enrollment due to births (see Table 4) will not be reached until 1976. This means that the high schools will continue to experience growth, both from increased births and from in-migration, until about 1978. Then there may be a gradual decline, depending on in-migration factors. The projection of enrollments in the Snowflake and Show Low high school areas for the next five year period is provided in Table 10.

The estimates of enrollments indicated in Table 10 are a little greater than the estimates made in the 1966 Survey Report. Industrial and community development have created the upward change. These estimates are conservative. It is anticipated that the development of a high school plant at Show Low will result in greater growth than projected, but the extent of increase is not known. Another projecting technique produced similar results for the totals for the first three years but the following totals thereafter: 1972-73=883; 1973-74=927; and 1974-75=973. These were dependent on continuation of the contract to educate Indians as were the projections in Table 10.

Table 10

Projected Membership at Two High School Sites Within Snowflake Union High School District, 1970-1975**

Grade Level	Snowflake High School*						Show Low High School					
	1970	1971	1972	1973	1974	1975	1970	1971	1972	1973	1974	1975
9	134	153	147	152	149	156	76	77	84	78	81	84
10	131	129	147	131	134	134	71	73	73	81	76	79
11	130	119	120	132	119	124	74	65	70	73	77	72
12	97	126	122	113	127	114	54	70	64	63	69	73
Total	492	527	536	528	529	528	275	285	291	295	303	308

*The assumption is made that Snowflake High School will continue to educate approximately 128 Indians each year.

**Year indicated represents year in which school year ends.

Projected Building Requirements

If and when a high school plant is developed in Show Low, it should be planned for an enrollment of about 600 for the central facilities required of the school plant. The initial building program should provide sufficient space in the administrative area, library, lunch facility, physical education space, shops, and some special classrooms for a student body of 600. The initial program should provide sufficient regular and special classrooms for about 400 students. Some of the special classrooms can be used initially for regular academic subjects as well. When the student body grows the main additions would be regular and special classrooms. Whether or not an auditorium is to be built at the outset should be left to the good judgment of the Citizens Growth Committee or some other special

committee. If one is built it should be built to accommodate no less than 600 people.

The exact building requirements cannot be determined until the educational planning has been accomplished. However, for purposes of this report it is estimated that the approximate requirements would be as follows:

Regular Classrooms:	5 @ 900 sq. ft. =	4,500 sq. ft.
Special Classrooms:		
Typing-Shorthand	900	" "
Biology-Gen. Science + Storage	1,200	" "
Chemistry-Physics + Storage	1,200	" "
Music Facility	2,000	" "
Homemaking Room	1,200	" "
General Shop	1,800	" "
Special Instructional Space:		
Instructional Materials Center	2,000	" "
Lunch Service Facility	3,200	" "
Gymnasium (complete)	11,500	" "
Central Service Center:		
Offices--Principals, Receptionist, 2 Counselors. Bookstore, Vault, Teachers' Workroom	1,160	" "
Usable Space Total	30,660	" "

Estimated Cost of New School Plant

It is most difficult to look into the future and estimate the cost of a school plant that might be built two, three or four years from the time the estimate is made. Building costs, labor and materials, have been rising rapidly. The building costs will depend on the final decision in terms of square footage as well as costs at time of construction. The best guide that can be given at this time seems to be as follows:

Usable space requirements	30,660	sq. ft.
Walls, halls, toilets, mechanical rooms, storage, etc. @ 25%	7,665	" "
Total square footage needs	38,325	" "

A breakdown on the estimated cost is as follows:

Construction Costs @$18.50/sq. t.	=	$ 708,828
Equipment Costs @ 20%	=	141,765
Architect's Fee @ 6%	=	51,036
Site Improvements (estimated)	=	20,000
Total	=	921,629

II. FINANCING PLANT NEEDS

Ability of the District to Finance Needs

The ability of a school district to finance construction needs rests with the financial base on which a tax levy must be made to pay for cost of the school plant. The assessed valuation of the Snowflake Union High School District during recent years, and projected assessed valuations for the next five year period are presented in Table 11.

Willingness of the District to Finance Needs

The Snowflake Union High School taxpayers demonstrated a willingness to make capital improvements by approving the proposed $495,000 bond issue in 1967. The property tax rates for the district have been reasonable during the past 10-12 years. They have been as follows:

1958 - $2.1001	1964 - $1.3980
1959 - 1.5193	1965 - 1.5639
1960 - 1.6598	1966 - 1.43606
1961 - 1.6086	1967 - 1.8467
1962 - 1.3888	1968 - 1.5920
1963 - 1.1109	1969 - 1.30 (est.)

Table 11

Past and Projected Assessed Valuations for Snowflake Union High School District, 1961-1974

	Tax Year	Assessed Valuation
Actual:	1961	$ 5,822,408
	1962	13,290,201
	1963	13,200,588
	1964	14,296,516
	1965	14,714,209
	1966	15,329,161
	1967	15,801,566
	1968	15,907,143
	1969	17,153,381
Projected:	1970	17,668,000
	1971	18,200,000
	1972	23,500,000
	1973	24,205,000
	1974	25,000,000

It is anticipated that when the justified needs of future years are properly presented to the qualified electors, the same decision will be made. However, there is always a danger in making such assumptions in districts that have needs in two or more communities. Some people in the area where a satisfactory school plant exists will vote against spending money to build additional school plant facilities in another area of the district. There is a psychological inhibitor in people that makes them want to retain what they have and not want to share in the cost of construction in another community. But the people of such areas should be aware of the financial efforts that have been made by all the people of the district to provide the finances to build the good school plant in the original area.

Bonded Indebtedness

In Table 12 the debt service requirements of Snowflake Union High School District are presented along with the estimated tax rates that will be needed to retire the present outstanding bonds.

From the foregoing account of the bonded indebtedness and the tax effort that will be needed to retire the outstanding bonds, it is evident that additional bonds could be retired should a bond issue be passed for another school plant. The exact financing proposal is not presented because of the uncertainty of when the bonds should be voted.

Suggested Plan for Financing Second High School

It is suggested that a bond issue of approximately $1,200,000 be considered for the financing of the second school plant and the improvements needed at Snowflake High School Gymnasium. This would

Table 12

Bond Service Requirements and Estimated Tax Rates
1967 Bond Issue in Amount of $495,000

Tax Year	Debt Service Payments			Estimated Tax Rates
	Interest	Principal	Total	
1969	$ 14,900	$ 50,000	$ 64,900	$ .38
1970	13,000	50,000	63,000	.36
1971	11,125	50,000	61,125	.34
1972	9,250	50,000	59,250	.25
1973	7,375	50,000	57,375	.24
1974	5,500	50,000	55,500	.22
1975	3,625	50,000	53,625	.21
1976	1,813	50,000	51,813	.20

provide classroom buildings for a student body of about 400 students and the central requirements for as many as 600. Between the time of this report and the proposed bonding program it is suggested that the 10¢ levy be maintained to pay outstanding obligations and should a surplus result it would reduce the bonding requirements by that amount.

Chapter 6

ISSUES AND PROBLEMS

I. ISSUES

Should a Second High School Be Built?

This is an issue in the minds of some; people of good will may question the feasibility or need for the second high school. To other people this is a problem. In their minds there is no question about the need, both from the students' standpoint and the standpoint of the development of Show Low and the entire southern region of the high school district. The survey team prefers to think of this as a problem and that the answer is "Yes."

When Should It Be Built?

This is an issue for several reasons. First, there is uncertainty about the continuation of educating Indian pupils after the expiration of the current contract. Second, the numbers of pupils in contributing elementary school districts have not experienced much growth. However, it was pointed out that the totals were somewhat deceiving because the declining birth years will not affect the high school enrollments for another five or six years. It is already affecting the primary grade enrollments. The high cost of money due to the inflationary spiral makes bonding relatively expensive at the current interest rates. The survey team recommends that the school district and patrons spend the 1970-71 school year

working at the educational planning that will be needed. A bond issue should not be presented to the people before the planning has been completed and in any event not before the fall of 1971. An architect would need from 3-6 months to complete plans and specifications after bonds are voted before bids could be taken. An opening date of September, 1973 would be feasible, if the contract to educate Indians is extended.

II. PROBLEMS

Legal Problems Related to Bonding

The United States Supreme Court has already ruled in two cases that qualified electors for bond elections must include non-property owners as well as property owners. With this decision the best legal advice in Arizona seems to be that no bond election can be held until Arizona law is revised in accordance with the United States Supreme Court decision and the Arizona Constitution is amended or an Arizona Supreme Court rules the existing provision unconstitutional. The 1970 legislature may present a constitutional amendment to the people to be voted in the fall of 1970.

Rising Construction Costs

The cost of construction has been rising rapidly during the past year. Many union contracts have already been negotiated so that workers will be receiving advancing hourly wages each year for the next two or three years. Materials are rising at the rate of three to four percent or more each year. There seems to be little hope that the costs will not continue to rise for the foreseeable

future. To delay construction because costs are rising is not in keeping with good economy.

High Interest Rates

The current interest rates are the highest that have been experienced in more than 50 years. The prospect of significantly lower interest rates within the near future seems highly improbable. At the time of final editing of this report school bonds were not being sold in Arizona because the maximum interest rate permissible by law (6%) was not high enough to attract investors.

Adequacy of Enrollment

The present plant is designed for 600 students but is capable of housing 750 pupils with crowded conditions. By having a few classes that begin at an early morning hour and some that extend to 6:00 p.m. it is possible to accommodate more than 750 students. But the time is fast approaching when it will be no longer possible to accommodate all of the students with present facilities. The survey team submits that the answer to this problem is not to continue to add to the capacity of Snowflake High School but to build a new high school in Show Low. However, it must not be forgotten that Snowflake High School has a critical need for more adequate dressing rooms, showers, etc. for the physical education and athletic programs.

Chapter 7

RECOMMENDATIONS

1. It is recommended that the Snowflake Union High School District start educational planning in 1970-71 for a second high school to be built in Show Low on the site already purchased. Prior to finalizing educational specifications and planning the enrollment projection figures should be updated. The district should retain the services of an educational consultant who would work with the staff in developing the educational specifications.

2. It is recommended that no bond issue be presented to the electors until the educational planning is completed and there is a fair degree of acceptance of the kinds of buildings to be built, the type of construction, etc.

3. It is recommended that a bond issue await clarification of the legality of bonding under Arizona Constitutional provisions and the U. S. Supreme Court rulings.

4. It is recommended that the Show Low High School be built when recommendation No. 6 of the 1966 Survey Report is obtained. (This has been cited in the beginning of Chapter 2, that of having 100 eighth grade pupils for two consecutive years in elementary schools which would send pupils to Show Low High School.)

5. It is recommended that careful assessment of effect of having, or not having Indian students to educate be made prior to any bond issue. However, if continued education of Indian students

is assured, and Snowflake High School increases in growth to a size beyond its present programmed capacity, then construction at Show Low will be preferable to additions at Snowflake High School because a high school plant may be required at Show Low within three to five years anyway.

6. It is recommended that a bond issue in the amount of approximately $1,200,000 be submitted to the qualified electors when the foregoing recommendations are satisfied. This estimated amount may have to be increased at the time of the election to cover additional costs created by inflation.